

CLAIMS:

1. A method of generating a synchronisation pulse representing a symbol boundary in an OFDM signal comprising useful symbol periods separated by guard spaces, with data in each guard space corresponding to part of the data in a respective useful period, the method comprising the step of deriving the difference between absolute values of samples of the OFDM signal separated by a period corresponding to the useful symbol period, and generating the synchronisation pulse in response to a substantial change in the difference values.
2. A method as claimed in claim 1, wherein the difference values represent integrated values obtained over a plurality of symbol periods.
3. A method as claimed in claim 2, wherein an infinite impulse response filter is used for producing the integrated values.
4. A method as claimed in any preceding claim, including an edge detector for detecting substantial changes in the difference values.
5. A method as claimed in claim 4, wherein the edge detector comprises a filter.

6. A method as claimed in claim 5, wherein the filter has variable coefficient.

7. A method as claimed in claim 5 or claim 6, wherein the filter is
5 a finite impulse response filter.

8. A method of generating a synchronisation pulse substantially as herein described with reference the accompanying drawings.

9. Apparatus for generating a synchronisation pulse, the apparatus
10 being arranged to operate in accordance with a method of any preceding claim.

10. A method of receiving an OFDM signal comprising
15 demodulating the signal in order to produce complex samples of transmitted OFDM symbols, and applying a Fourier Transform to the complex samples, the method further including the step of synchronising the Fourier Transform window with the OFDM symbols using a synchronisation pulse generated by a method according to any one of claims 1 to 8.

20

11. An OFDM receiver arranged to operate in accordance with the method of claim 10.

001280 "15124960

12. An OFDM receiver substantially as herein described with reference to the accompanying drawings.

001280" 45124960